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CASE STUDIES IN Health Information Management

Second Edition

CHARLOTTE McCUEN
NANETTE B. SAYLES
PATRICIA SCHNERING

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Second Edition

*Case Studies in
Health Information
Management*

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Health Information
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Management, Second Edition**

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Preface

Case Studies in Health Information Management, Second Edition, answers the educational need for a comprehensive case study workbook for Health Information Management (HIM) educators and students. The case format will help the student move from theory to application and analysis. The 240 comprehensive case studies are designed to provide both the AS or BS student with an opportunity to experience a wide range of HIM situations.

Case Study Framework

The cases are based on real-life HIM scenarios and demand thought and action from the HIM student. Critical thinking is a cornerstone of HIM practice. These case studies were designed to assist students at all levels develop and strengthen their critical thinking skills. Each case brings the user into the HIM setting and invites him or her to consider all of the variables that influence the information management situation. The students are then expected to utilize HIM principles in making decisions based on these multiple variables.

Case Studies in Health Information Management, Second Edition, provides instructors with a transitional tool to help guide students in “bridging the gap” between content knowledge and on-the-job performance in actual HIM practice. The cases represent a unique set of variables to offer a breadth of learning experiences and to capture the reality of HIM practice. Therefore, students should not expect to be able to just look up the answers in the textbooks. They will have to draw on everything that they have learned to answer many of the questions in the case studies.

Organization

The cases are grouped into parts based on 7 major HIM topics:

- Health Data Management
- Clinical Classification Systems and Reimbursement Methodology
- Statistics and Quality Improvement
- Healthcare Privacy, Confidentiality, Legal, and Ethical Issues
- Information Technology and Systems
- Management and Health Information Services
- Project and Operations Management

Within each section, we attempted to organize cases by subject area and then from less to more difficult. The classification of the cases is subjective and, as we all know, many of the HIM principles pertain to more than one HIM topic. For example, some cases in different sections may be quite similar but were included in the section for a different focus on the subject (e.g., personal health record [PHR] is addressed in Health Data Management as well as in Information Systems [IS]). Although reimbursement issues and coding go hand in hand, we have not included a variety of coding questions because there are already a myriad of excellent coding texts and workbooks. Our focus is on principles and compliance rather than specific codes.

Features

- *Case study questions* are written in such a way that the answers cannot be looked up in a textbook but instead must be found by drawing on the knowledge acquired during the course of study, promoting critical thinking.

- *True-to-life scenarios* are used throughout, including actual forms, codes, and the like that the HIM professional will utilize on the job.

Instructor Companion Site

All instructor resources can be accessed at <http://login.cengage.com> with your Cengage instructor account. If you are a first-time user, click New Faculty User and follow the prompts. Online instructor resources at the Instructor Companion site are password protected and include the following:

- The *Online Instructor's Manual* contains answers or suggested answers to every question found in the workbook. The *Online Instructor's Manual* contains Word files that can be easily manipulated by instructors so they can alter the information to meet their individual needs.
- A *Case Study Correlation Grid* illustrates at a glance which case studies contain principles related to the various American Health Information Management Association (AHIMA) Registered Health Information Administrator (RHIA) and Registered Health Information Technician (RHIT) competency statement domains. The cases are aligned with the Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM) standards for accreditation.

Student Companion Site at CengageBrain

Online student resources at the Student Companion site include web links, as referenced in the case studies; spreadsheets to assist in completing individual case studies; and a glossary of key terms.

To access the Student Companion site from CengageBrain, follow these instructions:

- Go to <http://www.cengagebrain.com>, type author, title, or ISBN in the **Search** window.
- Locate the desired product and click on the title.
- When you arrive at the Product Page, click on the **Free Stuff** tab. Use the **Click Here** link to be brought to the Companion site.
- Click on the Student Resources link on the left navigation pane to access the resources.

Features

- Over 200 case studies mapping to curriculum domains.
- Aligns to Commission on Accreditation of Health Informatics and Information Management Education (CAHIIM) standards for accreditation.
- Promotes application of concepts to real-world problems and situations.
- Realistic presentation and dialogue to prepare students for situations they may encounter on the job.
- Designed to capture student interest with stimulating and fresh graphics.
- Instructor's manual provides complete answer keys.

New to This Edition

Over 30 new case studies have been added to *Case Studies in Health Information Management*, Second Edition, set in a variety of health care environments, including hospitals, ambulatory care centers, nursing facilities, medical centers, long-term care facilities, state departments of health, and physician practices. This variety gives students an idea of the wide range of professional opportunities available to them.

The new and revised case studies are focused on giving students an opportunity to think critically about real-world challenges they may face, with an emphasis on trending health care topics, such as the following:

- Electronic Health Records, Use and Implementation
- Meaningful Use
- Health Information Exchanges
- Personal Health Records
- ICD-10 Implementation
- Compliance

About the Authors

Charlotte McCuen, M.S., RHIA

Charlotte McCuen, M.S., RHIA has 30 years of experience in health information management. She currently is an independent contractor as editor and coauthor of HIM textbooks and Adjunct Faculty in the Health Information Management BS program at University of Cincinnati. She has served as Associate Professor and Clinical Coordinator for 14 years in the Health Information Management Baccalaureate and Associate degree programs at Macon State College in Macon, Georgia. She has also served 15 years as HIM Director of an acute care hospital and a state psychiatric/forensic acute care hospital. She has consulted for long-term care facilities, a behavioral health hospital, physician offices, and renal dialysis centers. She received her Master's Degree from Mercer University in Health Care Policy and Administration and a Baccalaureate Degree from the Medical College of Georgia in Medical Record Administration. Charlotte volunteers professional service to both AHIMA and the Georgia Health Information Management Association (GHIMA), most recently serving on the AHIMA program committee and as president of GHIMA 2011–2012. She was the recipient of the Mentor Award for GHIMA in 2004.

Nanette B. Sayles, Ed.D., RHIA, CCS, CHPS, CPHIMS, FAHIMA

Nanette Sayles is a 1985 graduate of the University of Alabama at Birmingham Medical Record Administration (now Health Information Management) program. She earned her Masters of Science in Health Information Management (1995) and her Masters in Public Administration (1990) from the University of Alabama at Birmingham. She earned her doctorate in Adult Education from the University of Georgia (2003). She is currently Associate Professor in the Health Information Management program at East Central College in Union, Missouri. She has a wide range of health information management experience in hospitals, consulting, system development/implementation, and education. Nanette received the 2005 American Health Information Management Association Triumph Educator Award.

Patricia Schnering, RHIA, CCS

A self-employed entrepreneur, Patricia Schnering, RHIA, CCS, is the founder, owner, author, and publisher for Professional Review Guides, Inc., and PRG Publishing, Inc. In addition to earning a Baccalaureate degree in Business Administration from the University of South Florida, she is a graduate of the Health Information Management program at St. Petersburg College and holds both CCS and RHIA certifications. Prior to entering the Health Information Management field, Patricia worked for 13 years with a national corporation in departmental management. Since 1993, she has worked in health information services supervisory positions as a HIM consultant and as an adjunct HIM instructor at St. Petersburg College. She has served as president of her local professional association (GCHIMA) and a delegate to the state organization (FHIMA), where she has served on the board of directors, been a committee member, and received the FHIMA Literary Award in 2000 and 2006. Currently, Patricia serves as a delegate to the FHIMA and is on the advisory board at St. Petersburg College. She is also a member of AHIMA and the Assembly on Education (AOE).

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Charlotte McCuen, M.S., RHIA

This case study book is one that I have wanted to do for a long time. It is a product that I believe will be useful to both health information management educators and students. For this goal to be realized, it took a lot of support from a number of people:

- My husband, Mark, is supportive of the various projects that I am working on, including this project.
- My parents, George and Jeanette Burchfield, who taught me to work hard and the importance of education.
- My coauthors, Pat Schnering and Charlotte McCuen, for their hard work on this book.

Without their hard work, this case study book would not exist. I'm not sure any of us knew what we were getting ourselves into when we decided to commit to this project.

To the students, it is my hope that you find this book a useful part of your preparation to enter the exciting and challenging world of health information management.

To the educators, I hope that you will find this case study book valuable as you develop and continue to refine your courses.

Nanette B. Sayles, Ed.D., RHIA, CCS, CHPS, CPHIMS, FAHIMA

I especially wish to express my gratitude to Nanette Sayles and Charlotte McCuen, who were instrumental in creating this book. Nanette and Charlotte are seasoned professionals and are experienced instructors in HIA and HIT programs. Their level of energy and dedication to the profession is amazing.

I have enjoyed working with the staff at Cengage Learning. They have been quite accommodating and have taught me a lot about the process of publishing. I thank Lauren, Jadin, Rhonda, and all of the other Cengage team members that made this book possible.

There are some very special people in my life who were always there when I needed them. My late husband, Bob, always continued to keep me grounded, as I tended to spin off in space while I worked on the books, and my mother, Emma Miller, was my role model for perseverance leading to success. She embodied grace, courage, strength, and endurance.

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My reward is knowing that the materials you use here may assist you in preparing for the challenge of the workplace. I wish you the very best now and throughout your career.

Until we meet...

Patricia Schnering, RHIA, CCS

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SECTION ONE

*Health Data
Management*

CASE 1-1*Subjective, Objective, Assessment,
and Plan (SOAP) Statements and the
Problem-Oriented Medical Record (POMR)*

Review each of the following unrelated statements abstracted from problem-oriented medical record (POMR) documentation. Determine whether each statement is a subjective (S), objective (O), assessment (A), or plan (P) entry from the patient records.

1. _____ Rule out myocardial infarction.
2. _____ Patient complains of pain in the left ear and upon neck movement.
3. _____ BP 130/80. Pulse 85. Respirations 20. Temperature 98.6. Lungs clear. Heart regular. Abdomen nontender.
4. _____ Compare baseline mammogram 2006 to current mammogram.
5. _____ Uncontrolled hypertension.
6. _____ Chest pain.
7. _____ Pedal edema was 2+.
8. _____ Possible aortic aneurysm.
9. _____ Rule out cancerous tumor following biopsy of thyroid lesion.
10. _____ Patient complained of headache, fatigue, and photosensitivity.
11. _____ Patient states, "I am thirsty all the time."
12. _____ Discharge home with home health nursing and durable medical equipment. Follow-up in 1 week with Dr. Brantley. Home medications of Plavix 75mg, Zetia 10mg, Norvasc 25mg, and Tricor 145mg.
13. _____ BUN 21.0mg/dL, ALB 6.0gm/dL, bilirubin total 6.3mg/dL.
14. _____ Percussion was normal.
15. _____ MRI brain with and without contrast: negative findings.
16. _____ Complaining of pain in the low back.
17. _____ Chest x-ray: negative. EKG: A-fibrillation. Total LDH: 145.
18. _____ Laceration measured 2 cm above right brow.
19. _____ Determine treatment following results of radiology studies.
20. _____ Surgical Pathology Frozen Section: Lung LLL Wedge Biopsy reflects nonsmall cell carcinoma involving pleural nodule.

CASE 1-2*Problem-Oriented Medical Record (POMR)
Record Format*

Read the patient visit report shown in Figure 1-1 and answer the following questions.

1. What is the patient's chief complaint?
2. What information in the scenario is "subjective"?
3. What information in the scenario is "objective"?
4. Does Dr. Jenkins have a definitive assessment of Ms. Gerry's problem? If so, what is it?
5. What is the plan for this patient?

Patient Visit Report

HISTORY OF PRESENT ILLNESS: Ms. Gerry is an 85-year-old female who fell out of a wheelchair today. She comes in complaining of severe pain in her left hip. X-ray reveals an intertrochanteric fracture of the left hip.

PAST MEDICAL HISTORY: Alzheimer's disease, GERD, COPD, coronary artery disease.

MEDICATIONS: Zantac 75mg in the AM; Synthroid 88 mcg in the AM; Norvasc 2.5mg in the AM; Nebulizer QID; Coumadin 2.5mg Monday, Wednesday, Friday, and Saturday.

PHYSICAL EXAM: Shortening of the left leg; good bilateral pedal pulses.

PLAN: Medical clearance. Vitamin K to decrease protime. Bucks traction. Open reduction and internal fixation of left hip if cleared for surgery.

X-RAY AFTER SURGERY: Diffuse osteopenia present. Patient is post placement of a dynamic hip screw within the proximal left femur. There is near anatomical alignment of the intertrochanteric femoral neck fracture.

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Figure 1-1 *Patient Visit Report*

CASE 1-3*Master Patient Index (MPI) and Duplicate Medical Record Number Assignment*

The ad hoc report shown in Table 1-1 (Master Patient Index [MPI] Discrepancy Report) is a reporting function of the MPI system. This system function applies weights for the probability, on a scale from 1 to 15, that the two patient encounters in each case are likely to pertain to the same patient or not. The policy of the hospital is to retain the survivorship record number when correcting duplicate number assignments on the same patient.

Review the ad hoc report provided in Table 1-1 for analysis of duplicate medical record number assignments.

1. For each pair of patients listed, which medical record number should be retained, based on the hospital policy?
2. Which numbers listed do you think require further documentation review to determine if the patients are the same or not?
3. Which record documentation or data elements from the patient record could be used for determining “matches” of the same patient versus different patients?

Table 1-1 *MPI Discrepancy Report*

MPI Discrepancy Report						
Case	Patient Name	MR#	SSN	DOB	Residence	Wt.
1	John Carmichael	016792	256-14-9876	1-5-1982	111 Holly Dr.	14.1
	J. D. Carmichael	019156	256-14-9876	1-5-1982	295 Stream Dr.	
2	Susan A. Pherris	042121	031-55-8642	5-4-2002	Hwy. 24, Box 11	5.0
	Susan Ferris	050377	386-12-7854	5-4-1962	456 First St.	
3	Amanda Johns	114682	487-09-4210	8-2-1984	219 Bates St.	10.4
	Amanda Willis	143022	487-09-4211	8-2-1984	532 Jesse Dr.	
4	Jonathan Allen, III	015467	276-22-9768	1-9-1955	131 Oaks Rd.	2.5
	Jonathan Allen	139878	297-46-2089	9-8-2006	197 Trey Cir.	
5	William Jones	122199	698-28-7667	2-6-2004	100 Windy Rd.	13.0
	Bill Jones	140981	698-28-7661	2-6-2004	100 Windy Rd.	
6	Tracy Lemon	130961	209-88-0120	1-9-2001	28 Hillman Ave.	1.5
	Treina Lemon	098972	462-90-0156	8-5-2006	101 Troy Ct.	

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CASE 1-4

Enterprise MPI (E-MPI)

As the assistant health information management (HIM) director of a growing health system network that currently includes 3 hospitals and 16 outpatient clinics, you are a member on the Information Systems Committee. You have been asked to oversee the development of a standardized, system-wide enterprise master patient index (MPI) that will include all patients and their information from all encounters within the system network.

1. **Level 1:** Research the recommended core elements of a single-entity MPI and a multi-facility enterprise MPI through professional journals and list references used (e.g., *Journal of AHIMA*).
2. **Level 2:** Develop a data dictionary, defining each of the data elements needed.
3. **Level 3:** Design a data display screen of a multi-facility enterprise MPI screen.

CASE 1-5

Chart Check-Out Screen Design and Data Quality

You have been recently hired by a vendor who develops chart management software. In your role as the subject matter expert, it is your responsibility to ensure that the system will meet the needs of users in the HIM Department. One of your first duties is to evaluate the screens that have been designed over the past few months when the vendor's company did not have an HIM professional on staff. The first one that you review is the chart check-out screen for the chart locator.

1. Evaluate the screen design in Figure 1-2 to identify ways to improve data quality, including the comprehensiveness and appropriateness of the fields on the screen. Make recommendations for improvement.

To help you in your project, you may reference form design and control in the textbook *Today's Health Information Management: An Integrated Approach, Second Edition* (2013), by Dana McWay.

Chart Check-Out

Medical Record Number

Patient Name

Location checked out to:

Date checked out:

Initials:

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Figure 1-2 *Chart Check-Out Screen*